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Knowledge management (KM) is revolutionizing the ways business and public institutions preserve institutional memory and knowledge sharing. Companies found KM important for competitive advantage in the marketplace, because it provides a way to reflect on “lessons learned” from previous projects and programs. Information professionals (IPs) provide services to their clients by describing and locating needed information. New technologies and institutional needs have created a divide between the traditional IPs (librarians, records managers, and archivists) and KM positions (knowledge managers and information managers). Questions regarding whether librarians have the appropriate knowledge, skills, and abilities (KSAs) to handle the new era in IT presume an archaic, information-preserving heritage. The archival artifacts are not physical manifestations but continuously changing collections of bits and formats. It would seem KM and records in knowledge management systems (KMS)s require an IP with the technical skills and educational background to handle the new demands.

Headings:

Knowledge Management

Records Retention

Records Managers

KNOWLEDGE MANAGEMENT (KM) REQUIRES RECORDS MANAGEMENT:
THE ROLE OF RETENTION SCHEDULES WITH KM PROGRAMS

by
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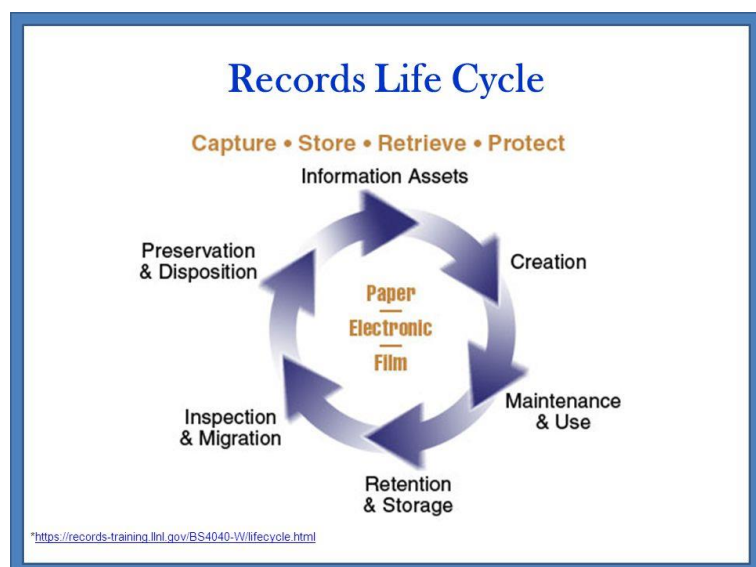
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Introduction

Knowledge management (KM) is revolutionizing the ways business and public institutions preserve institutional memory and knowledge sharing. Companies found KM important for competitive advantage in the marketplace because it provides a way to reflect on “lessons learned” from previous projects and programs. In other words, companies can avoid financial and resource costs in money, personnel, time, and reputation (e.g. failures in final product or inability to reperform tasks). Information professionals (IP)s provide services to their clients by describing and locating needed information. New technologies and institutional needs have created a divide between the traditional IPs (librarians, records managers, and archivists) and KM positions (knowledge managers and information managers). The debates regarding whom an IP is and the nature of KM go back to the late 1990s. Questions whether librarians have the appropriate knowledge, skills, and abilities (KSAs) to handle the new era in IT presume an archaic, information-preserving heritage. Managing information no longer takes place only in physical ledgers or paper forms. The workplace is a digital space, ambiguous and “born digital.” The archival artifacts are not physical manifestations but continuously changing collections of bits and formats. It would seem KM and records in knowledge management systems (KMS)s require an IP with the technical skills and educational background to handle the new demands.

Problems arise when KMS developers do not cater their products to the unique cultures or needs of their clients. It is for the clients to customize or set expectations for new KMS installations. There need to be clear goals and expectations for the system, along with user training. This entails myriad of tasks and considerations. A particularly important consideration that KMS developers cannot pre-package, and an aspect of managing records that requires erudite personnel, is records retention. This is due to differing natures of companies' policies for records retention schedules. It is vital that the KMS, the employees, or both perform the necessary actions to ensure institutional memory is not lost. Thus, it is imperative, because gaps in retention leads to costs in finances, resources, reputation, and duplication. IPs are especially skilled for making these decisions.

For this study, IPs are personnel and staff with Information and Library Science degrees or Certification in Records Management. IPs perform important tasks and procedures to care for records during their lifecycle, from creation to capture to final disposition (which may mean disposal). An important stage in a record's lifecycle is the records retention schedule (RRS), because the digital records retention schedule will determine fate a record's fate (permanence or destruction) and when this process occurs. This study will determine if IPs are involved in developing and maintaining records retention schedules. In other words, the focus is to identify whether IPs are responsible for creating records retention policies and auditing existing ones. The study will also show trends in hiring IPs to perform RRS tasks.



This study is important because there is a lack of research studies focusing on records retention policy creation in businesses in the US with KM programs to date. Cheng (2018) contributes a case study on a Hong Kong public secondary school using KM and records management. Swartz (2015) presented at the International Federation of Library Associations conference about South Africa's Parliament implementing KM and the importance for IPs involvement. Jones and Vines (2016) mention the need for IPs involvement in KM programs.² Articles discussing IP involvement in KM are usually overviews of involvement or provide evidence for IP skills useful in KM settings. IPs from archives and libraries can have the necessary skills, but it is unclear whether or how they are used for these tasks. This study will focus on records managers, because they are commonly involved in managing records' retention schedules. From this study there can

¹ Burneston, Kristin; Johnson, Greg; Stoykovich, Eric; and Sturm, Charlotte (2011). Designing a Corporate Records Management Portal for NARA [46 Slides]. <https://slideplayer.com/slide/6937829/>

² To avoid confusion, it may be beneficial to point out a KM term in the footnotes that may cause confusion. Sandalin's (2017) recent article focuses on knowledge retention, but it does not say anything about records retention. Knowledge retention is an activity to capture employee knowledge (e.g. exit interviews, locating employee records for capture, or other strategies that retain knowledge lost when employees leave a company) and is a different function within a KMS.

be efforts to identify the best candidates for making retention policies, which will positively impact financial impact.

This study does not claim that IPs must be involved in all aspects of KM. There are special skills that chief knowledge officers and chief information officers fulfill. IPs can be, and are, digitally savvy to understand and provide valuable skills and knowledge for making retention policy decisions. It seems strange that there is such an overlap of IP and KM tasks, but many companies have divided the two into their own departments. In some cases, IPs, such as Archivists and Librarians are involved in KM, but it is more common to find Records Managers in KM positions. It would seem that some collaboration would benefit both departments. A collaborative effort between the two could benefit records managers through best standards and practices and archivists and librarians through inter-departmental reputation. This study will identify whether IPs are creating or reviewing and auditing RRSs or not.

Literature Review

Gaps in the literature

The literature calls for better policymaking, especially in records retention schedules, yet there are no studies that focus their attention on who or how records retention schedules are formed or audited (Neef (2005), Rogals (2017), and Yunus and Ariffin (2013 to name a few)).³ Therefore, the study and findings presented in this paper fill a gap in the research landscape. Databases searched include KM World, Library and Information Science Source (LISS), Library and Information Science Abstracts (LISA), and Business Search Premier. Google searches identified blogs or organizations focusing on this paper's topic-matter. Searching strategies include thesaurus and keyword phrases "knowledge management," "records retention," and "records management" and truncation. The LISS database returned zero results using a thesaurus search with phrases mentioned above. Dropping "records management" returns one result; Sprehe (2008) argues for records managers working with electronic document managers to form records retention schedules. There is no evidence that records managers (RMs) are performing these tasks or what skills/knowledge is necessary for RMs to perform these complex

³ Oracle Fusion Middleware is a product companies can use to orchestrate records retention schedules. While it provides tools for creating and auditing RRSs, it cannot automate RRS creation or review. RRS policymaking requires professional involvement with knowledge about the legal and preferred scheduling based on the company's needs. <https://docs.oracle.com/en/middleware/>

tasks. It is always a given that RMs or information professionals (IPs) should be involved in these decisions. A further search strategy was citation chasing, which identified foundational sources for knowledge management (KM) and RM. The next section provides evidence that bad retention schedule policy can cause companies a lot of headaches and financial loss.

A particularly important find in the literature for this paper is the focus on RMs as records retention policymakers. The paper's initial direction was to point out whether archivists or librarians are the IPs responsible for records retention schedules and policymaking. After much research and discussions with a corporate archivist and a leader in a records management consulting firm, it is apparent that focusing on archivists and librarians would miss the target population commonly developing and auditing retention schedule policy in business environments. Thus, the focus shifted to RMs and identifying what entities are involved in facilitating these policy decisions.

Lost knowledge, found problem

Davenport and Prusak (1998) explain the importance for knowledge management. It gives companies and other institutions advantages in innovation and competition. Ideally, KM saves companies in time and money. British Petroleum Exploration found that the exploratory firms participating in a Virtual Team program were more effective in their time and expenditures than a firm that relied only on data they controlled (p. 21-24). KM is a business model using social networking systems that rely on members being able to interact with one another. Sharing knowledge keeps companies from reinventing ideas and concepts and keeps learned knowledge from leaving a company when employees

retire or leave the company. Records managers enter when these interactions include artifacts like documents, audio/visual media recordings, and other explicit items.

DeLong (2004) provides concrete evidence for KM loss due to lack in planning. Knowledge loss impacts finances, personnel, and the institution. Institutional layoffs mean people with knowledge about how things work, and other nuanced issues, are leaving and taking their experience with them. Work tasks have become more and more complex meaning that new hires must know how to understand what it takes to perform their tasks. This is particularly true when a scientist takes over another's project or a team of developers tries to improve on a previous team's product. DeLong presents many cases where companies had to spend hundreds of thousands of dollars and repair their reputations with stakeholders after a mistake occurs. One such case depicts the difficulties a new database analyst had taking over a complex system of "30 million records of his company's credit card customers" from another analyst who had structured a naming system required for the system to function. After losing \$100,000 to recreate a system workflow and failing to provide the marketing department their needed data in a timely manner, the database analyst's department to rebuild their reputation (pg. 17). DeLong also presents NASA's failure to manage knowledge for moon landings. Scientists with knowledge about the Apollo missions to the moon were given early retirement in the 1990s and their knowledge left with them. A combination of the scientists leaving and important documents for the missions missing means NASA must will "be starting from scratch...(11)." Retaining this knowledge could avoid these procedural and costly mistakes.

Hase and Galt (2011) point out that lapses in “attention to records management” can have terrible consequences. Problems include lack in accountability, scope, unified classification, audits, retention, storage, and problems in duplication. Retention is particularly problematic because it identifies what, how, and when something needs to be saved. If the policies, schedules or both are difficult to understand or follow, there is high likelihood that important records will not be retained correctly or at all.

Records’ lifecycles require a retention schedule

An important aspect for KMSs is to manage records retaining knowledge over the course of the records’ lifetimes. This is especially the case for electronic records. Many authors discussing records management argue for records managers’ involvement in policymaking. Bak (2012) calls for archivists to change from traditional ideas of permanent records management and begin their involvement in records’ lifecycles. The focus here is to view records at the item-level, which is possible with electronic records. Yunus & Ariffin (2013) point to records management and IT departments to perform records capturing and lifecycle management. They also argue that records management should work “with the responsible division [for] preparation of records retention schedules earmarking material for permanent retention” (pg. 7) to avoid arbitrary actions for disposition. Diers (2016) claims records and information managers along with information governance programs “must include lifecycle processing of the organization’s information assets” and calls for retention schedules that are “easy to use” and updated annually (pg. 37). The point from these sources and others is that records managers need to be involved in records retention schedule policymaking.

Who will make decisions about records retention?

The responsibility of creating a records retention policy has direct influence on what, when, and how records are retained or destroyed. Records retention is mentioned in the literature, but there is not an attempt to explain how retention schedules are designed or who is writing the policies. One could make the assumption that many businesses treat records retention as an afterthought. An example is Srikantaiah & Koenig's (2000) edited work *Knowledge Management for the Information Professional* explaining IPs' involvement in KM. A chapter by David P. Schmidt points out ethical concerns surrounding KM without mentioning records retention schedules. Using the metaphor of a bucket holding knowledge, Schmidt expresses the need to know what knowledge is kept in, allowed out, how to secure the knowledge from "contamination," and stem "overflowing (pgs. 125-6)." Another chapter, by Vikas Sahasrabudhe, presents the technical side of KM. Throughout the chapter he provides ways information technology (IT) can provide an architecture for managing and dispensing explicit forms of knowledge. He ends his chapter calling for those using KM to "develop innovative applications of information technology to support knowledge management so as to enable getting the nugget of knowledge in a timely fashion when and where needed, including when new knowledge becomes available (pg. 276)." This suggests that technical solutions require involvement from IPs who can identify and set schedules for managing records for retention. The chapters explain the importance for IPs as information disseminators but do not explain how IPs set policies for collecting the information.

In Jennex's (2005) collection of KM case studies, authors touch on the fact that collecting, capturing, and retaining are important activities for KM practices, there are no

further investigations on the matter. It is as though important records will be identified and will magically be saved for future use in KMSs. A prime example is Gail Corbitt's chapter on Hewlett Packard's split-up into HP and Agilent. New employees to the companies and current employees performing new jobs due to the split-up needed knowledge from the former personnel. A major challenge Corbitt identifies is the need to "figure out ways to define, store, and access the needed 'knowledge' so that existing people can tap into the expertise as they need it to keep doing their jobs (pg. 53)." She also points out some ways that this knowledge is structured and accessed through an intranet and databases. Her only mention of a records retention scheduling policy exists as individuals with expertise in certain business specialties deciding what personnel and resources are useful for accessing knowledge for jobs (p. 62). In other words, engineers will decide engineering records disposition. While this case study shows agility and quick thinking can rectify gaps in knowledge, it seems ludicrous that this is a viable long-term strategy. Having a set policy for records retention will make knowledge management sustainable after the initial gaps are filled.

Ideally, trained, information professionals will make records managing policy decisions. It seems logical to have someone with a degree in Information and Library Science set retention schedules because they have foundational knowledge for making effective policies. There are many works in the late 1990s and early 2000s that point out the need for information professionals to inject themselves into their institution's KM program. Broadbent (1998), a management academic and professional librarian, states, "[C]onsiderable thought has gone into how good knowledge management practices can improve the competitiveness and financial performance of firms and ways in which this

can be measured” (p. 25). She later presents a bulleted list the Economist Intelligence Unit created that stating, “The organization has a process to archive and distil learning...” and, “Procedures exist to retain the business knowledge acquired by people who leave the organization” (p. 29). She also mentions librarians’ skills for people management and analytics.

Stephens et al. (2000) article “Electronic Records Retention: Fourteen Basic Principles” provides a useful overview for understanding the nuances of electronic record retention. Like non-electronic records, electronic records require a systematic approach to decide disposition. Stephens explains that having an established policy avoids arbitrary actions and protects decisions to destroy records. Stephens points out that records managers should “Develop a consensus among responsible parties” (p. 48). He lists the parties from most important to least: department managers, legal counsel, tax manager/internal auditor, the department’s records manager, and the archivist. This might seem problematic to those who think record retention policy is a job best performed by archivists and librarians, but these records require departmental expertise outside archives and libraries commonly in a KMS.

Tombs (2004) presents the differences between KM and RM. He separates KM as a structured approach to records retention compared to RM as an agile approach. He claims RM is better for managing knowledge than KM because of the complexities managing knowledge.

KM is:

- Expensive to implement
- Unclear what constitutes KM
- Unclear how to implement

RM is:

- Low cost
- Clear what constitutes RM
- Clear how to implement

Murray (2018) refers to the US National Archives setting retention schedules for record disposition. Granted public institutions like federal and state institutions will rely on their archivists for record policy creation. This is very different from the business sector, which separates librarians and archivists from KM activities.

RRSs Require RM Involvement

Every article that discusses records retention makes comments about records managers in various departments performing important tasks. Not surprisingly, journals for archivists, librarians, and records managers point out that these professionals should be involved in records retention schedule policymaking. Beastall (1998) lauds RMs and their abilities to automate gathering information and alerting when records need transferring or destruction. Jones and Vines (2016) point out that archival science produces important skills for adding context and description to records. The training also informs for records retention schedule-making. Namukasa's (2017) uses a study on

Uganda's government utilizing their national archives for creating retention schedules and setting policies. Wiler (2016) argues for records managers and the legal department to work together to ensure better records retention scheduling policies. As stated before, there are ample arguments for information professionals to participate in policies for records. No article was found identifying how many companies or organizations use RMs and IPs for RRS creation or auditing.

Standards Enter Two Decades Later

In November of 2018, twenty years after Davenport and Prusak wrote *Working Knowledge*, the ISO 30401:2018 for KMSs was published. It seems fitting that it has taken so long to develop on the international stage. Companies and organizations have established their own standards, or lack thereof, and the results are amorphous and arbitrary. The international standards provide a high-level structure for implementing a KMS to structure KMS development and functions. This document is important for this study because it sets some foundational expectations in records management. Two key points are "Retaining current knowledge" and "Handing outdated or invalid knowledge (p. 6)." These require that a KMS systematically "safeguard the organization from the risks of knowledge loss" and ensuring that the records or information retained are proactively managed so bad or misinformation does not plague the organization. There is also a focus on making sure the appropriate resources are available to implement a KMS. This includes having the appropriate personnel for "accountable roles within the [KMS] (p. 10)." This means that IPs are necessary for aspects of the KMS where the system's records are concerned. A KMS is not only a networking system that connects personnel with information needs to experts but a system that connects personnel to documents,

audio, video, or other formats with information. Thus, it is paramount that these explicit formats in a KMS have RRSs created and audited by IPs.

Methods

This study is a two-phase, mixed methods design using a quantitative survey preceding semi-structured interviews to collect data focusing on records managers' involvement in planning retention schedules for records in KMSs. The assumption is and reason for this study is that a lack of trained RMs making decisions about records retention will cause loss in information and a breach of privacy for the company and its employees. This is not a comprehensive study to identify what entities *should* develop or perform retention schedule policy or what issues result in RMs involvement or non-involvement. The goal is to identify the RRS creators and auditors for businesses using a KM program.

The lack of previous studies requires generating a foundational dataset in hopes that a better funded and resourced study may continue investigating whom are making RRS decisions. The survey questions are modeled after other studies that gathered data regarding information professionals and their activities in their institutions. The survey will be short and direct due to the time allotted for the paper but should establish trends that will aid future studies in records retention and information professional involvement in policymaking in an institution that uses a KMS. Since the data will be based on a questionnaire performed once, the survey will be cross-sectional.

Population

The population consists of records managers working for companies using KMSs in the United States. The preferred candidates will work with electronic/digital records. This includes RMs who digitize analog records and records born and not born-digital. The survey includes analog RMs in case the response was too small from the preferred population. The electronic/digital RMs are preferred because they are most likely affiliated with KMS activities.

Survey

The survey consists of sixteen questions and a request for a follow-up interview. The questions will identify the responder's job title, how long they worked in the position, their educational level, type of records managed, whether a records retention policy exists at their company, whether the responder participated in records retention policy and schedule creation and auditing, and whether their company uses knowledge management. The survey is short due to time limitations for the author and to increase likelihood that candidates respond to the survey. There is also an option for the responders to select whether they will participate in a follow-up interview. Based on the Bureau of Labor, 75,188 Information and Records Clerks in federal and industrial positions were employed as of May 2017. This means a total of 383 respondents are needed for a 5% margin of error and 95% level of confidence.

Dissemination

The preferred ways to reach the candidates will be professional networks. The professional networking sites and groups are LinkedIn, Special Libraries Association

(SLA), Association for Information and Image Management (AIIM), Society of American Archivists (SAA), KM World, and Association of Records Managers Administrators (ARMA). The Records Management Professionals Group in LinkedIn, for example, has 7,560 members. There are also KM groups that could have RM members. The survey can only be taken once by a person, so information explaining this will be placed in the survey's brief. Data analysis will identify duplication in surveys because there are many ways for survey-takers to answer questions. It is very unlikely that two different survey-takers will have identical content in their answers.

Data Gathering

The quantitative data is analyzed using JMP software. The software provides correlation and regression reports. These will provide relationships between RMs' education and/or years working in their position to whether they participate in policymaking and/or auditing. It is possible to see if these variables affect one another.

Survey-takers can select whether they will avail themselves for a follow-up interview. A recording and/or notes will be taken during the interview for analysis. From the interviews, coding terms and creating themes from terms provides a deeper understanding for survey answers. For example, it is possible to understand why records managers with X-level of education and X-years working in their positions are/are not participating in records retention planning. It is also possible to learn other aspects of record retention scheduling that the survey data does not provide.

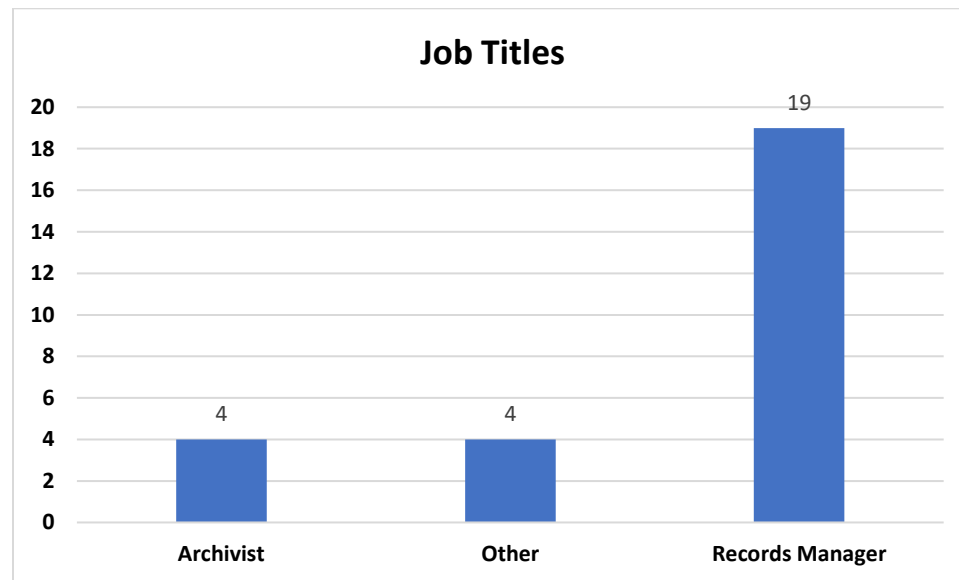
The methods for data gathering and analysis intend to form a foundational dataset that others can build upon. The lack of previous analysis in records retention schedules in

knowledge management systems makes this study more important, especially because of the consequences for bad policymaking that are mentioned in the previous chapter.

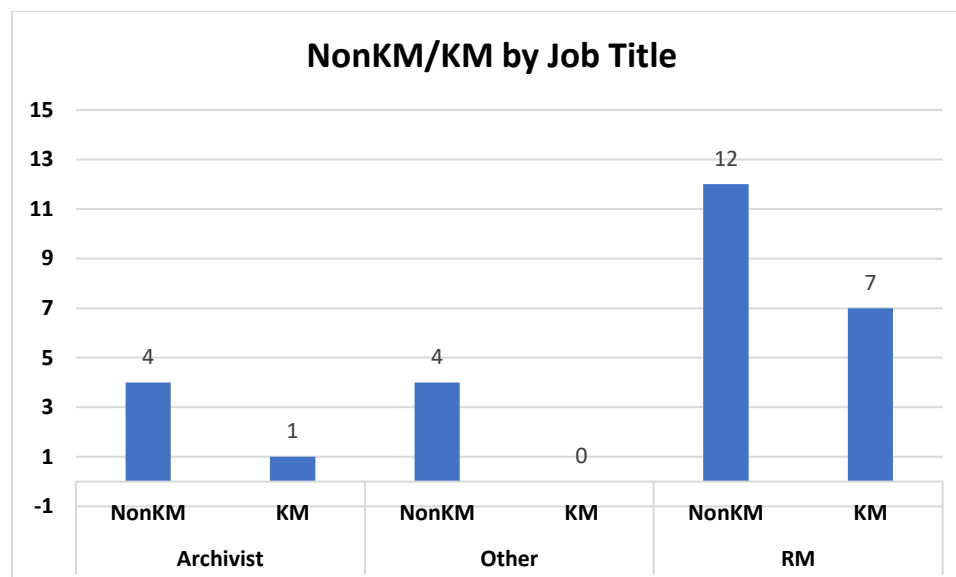
The second phase is a semi-structured interview. It is useful to be able to obtain qualitative data to supplement the quantitative. The goal for the interview questions is to connect the survey-takers to RRS creation and auditing KMS records, because the survey does not explicitly ask whether the RRSs the survey-takers create or audit are KMS records. The survey-takers are asked whether a RRS policy exists for KM related records, who the survey-taker thinks is the best kind of person in the company to make RRS policy decisions, whether an RM manages KMS records at their company, and whether they have anything else to add. Based on how the interviewees answered previous questions affected how latter questions are asked.

Findings Section

Overall Results



A total twenty-eight completed surveys and four interviews provide data for this study. The data contained large variability within job titles and departmental positions. Data cleaning strategies attempt to lessen the variability by combining like titles into Records Managers (RM) (19/68%), Archivists (5/18%), and Other (4/14%). RMs are positions consisting of records, document, and information management. RM supersedes archives or other positions included in job titles (e.g. Director of Archives and Records Management). Positions are labeled Archivist when “Archivist” is labeled without RM in the title. Other identifies positions that do not fit RM or Archivist (e.g. “Consultant”).



Departmental position variety is structured into positions that participate in managing KMS records and not participating in managing KMS records (KM and Non-KM respectively). The data does present an opportunity to compare survey-takers in KM versus survey-takers not in KM positions. In order to designate survey-takers are or are not working with KM records is based on the departments to which they report. Those working in KM or administrative departments are combined. All other departments are designated as Non-KM. This yields eight survey-takers in KM departments (29%) and twenty not in KM departments (71%). Making this binary aids data analysis. It is determined that none of the interviewees were involved in KM RRSs because each interviewee admits that KM records are not part of their workflows. They often identified KM related records as administrative or some other “large bucket” category.

The survey questions regarding education and certification makes it possible to differentiate survey-takers into IP and Non-IP. For this study, survey-takers with a bachelor’s or master’s in Information and Library Science (ILS) or a Certificate in Records Management are IPs. This yields a total fifteen IPs (54%) and thirteen Non-IPs

(46%). Again, the binary structure makes for better analysis. There was consideration to include survey-takers with a certain amount of years on-the-job as IPs, but there is no evidence of foundational training in best practices or skills. One of the survey-takers, identified as a Non-IP, points out that their successor must have either an ILS education or earned their Certificate. Qualitative data like this aided data cleaning decisions. Further analysis of this study's data with other studies of this nature could provide more effective parameters for identifying IPs.

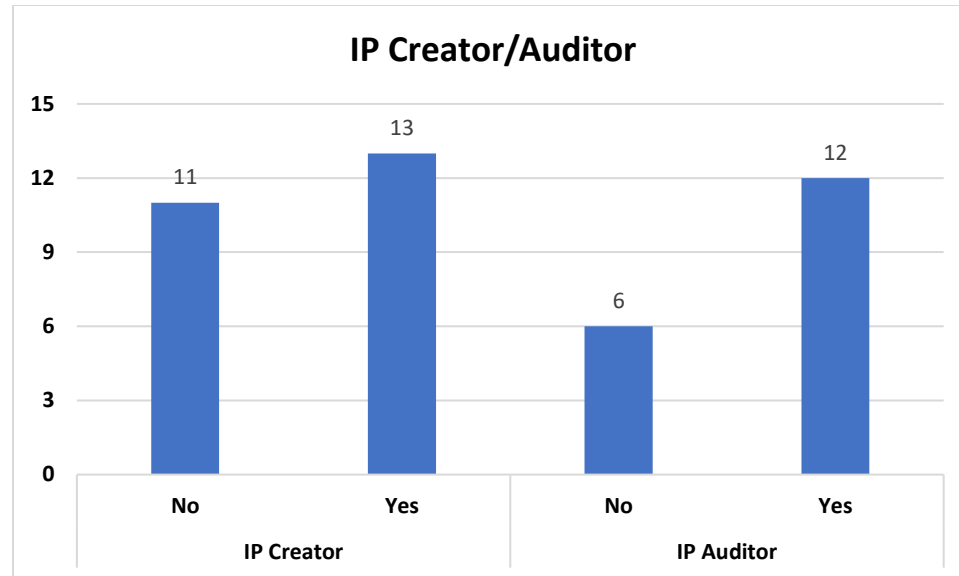
The survey question regarding participation in company archives and/or libraries connects this study to the literature calling for involvement from these disciplines in RRS creation and auditing. Survey results show seventeen participate in an archive and/or library (61%) and four do not (14%).⁴ Further analysis shows nine IPs (32%) and eight Non-IPs (29%) are responsible for archives and/or libraries at their company. This means that many Non-IPs hold positions arguably held by IPs. Knowing more about the prevalence of IP training for personnel in archives and library positions could further identify whether or not they are preferable for RRS creation and auditing. Based on this study, one cannot assume involvement from archives and library personnel as best. The interviewees all agree that IPs must be involved in RRS related activities, but they specifically identified RMs' mandatory involvement in these activities. Future analysis of this study's data with other studies focusing on company archivist and librarian IP-status could provide evidence for these personnel's effectiveness. It could also point out companies' employing practices when considering IPs for positions in the company.

⁴ Seven companies do not have either an archive or library (25%).

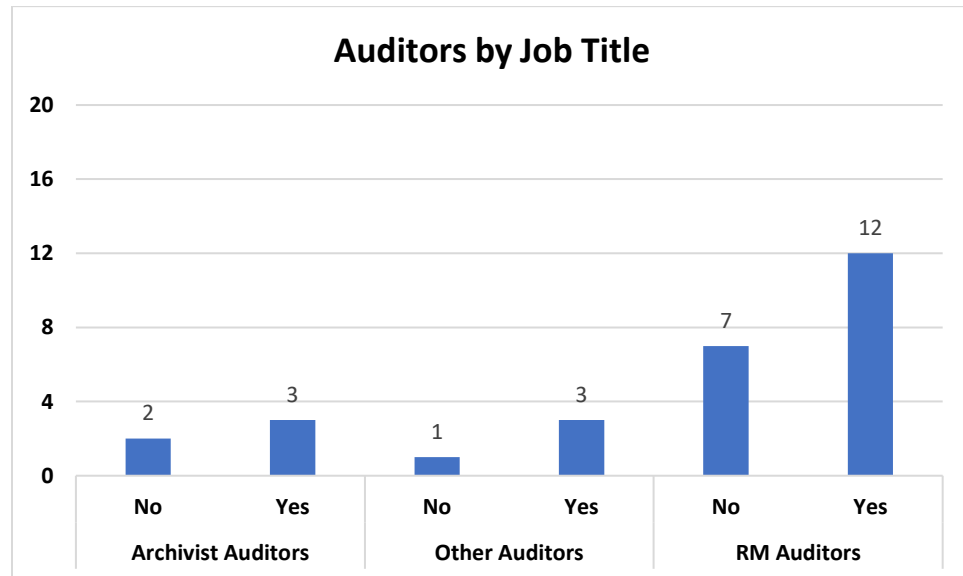
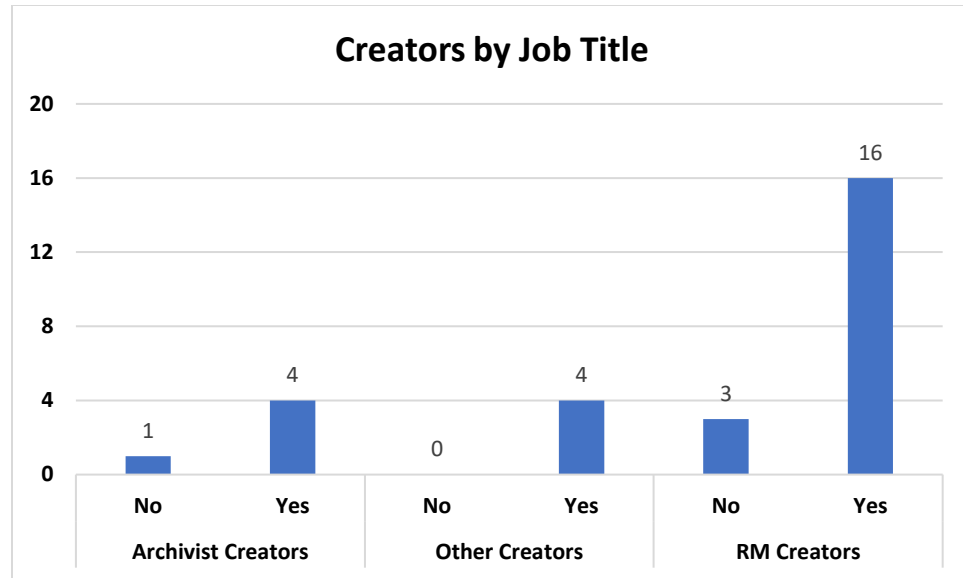
The survey shows that most companies have RRSs. Twenty-seven say RRSs exist (96%) while only one did not have RRSs for its records (4%). It can be said that the prevalence in RRSs in companies means retention schedules are a part of company records lifecycles. More to the point, all eight of the KM related departments have RRSs in effect. This means that someone has devised KM RRSs. Further analysis shows that two of the eight did not participate in RRS creation. One of the two's predecessors created the RRSs while the other says another department created the RRSs. The same exists for Non-KM records showing one predecessor and one unsure who created the RRSs.

The participation percentages between creating and auditing presents useful data regarding trends relating to IP involvement in RRS activities. A clarification in the data must be addressed first. One survey-taker states that they do not currently have an RRS policy in place but participates in RRS creation. The assumption is that this survey-taker is currently participating to create RRSs and a policy. This means that, though twenty-seven surveys state an RRS policy is in place, twenty-eight will be considered for participating in RRS creation. The data shows twenty-four participate in creating RRSs (86%) while four (14%) claim that someone else created the RRSs. Two claim a colleague or predecessor created the RRSs (7%), while two do not know the source (7%).

Fewer audits occur compared to RRS creation, but a higher proportion of audits take place than not. Nineteen survey-takers claim RRS audits (68%) have occurred compared to nine not performing audits (32%). Of the nineteen, eighteen participated in the audits and one did not.



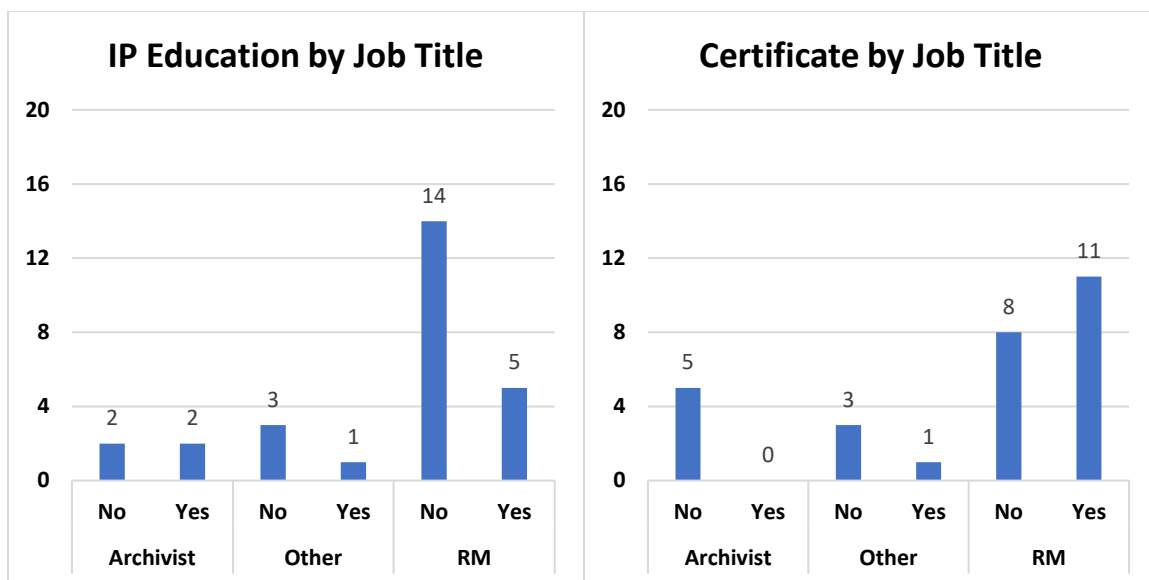
Separating IPs from Non-IPs participating in RRS creation and auditing provides further analysis. Analyzing these numbers shows thirteen IPs (54%) and eleven Non-IPs (46%) participated in RRS creation while twelve IPs (67%) and six Non-IPs (33%) participate in RRS audits. IPs are more likely to participate in either creation or audits, but twice the IPs perform audits than Non-IPs. Analyzing IPs performing a combination of RRS creation and audits shows ten IPs and six Non-IPs perform both. The small drop in IPs compared to larger drop in Non-IPs performing both aspects of RRS expresses the value for IPs participating in these facets. This data shows that IPs are likely to perform both creating and auditing rather than one aspect of RRSs, while Non-IPs are likely to perform both if involved in RRS audits.



Another way to analyze RRS creators and auditors is by job title. Of the nineteen RMs, ten (%) perform both creating and auditing, six (%) only create, and two (%) only audit RRSs. Of the five Archivists, three (%) perform both, and one (%) only creates. Of the four Others, three (%) perform both and one only creates. All three job title groupings share in a higher number of both creating and auditing participation. RMs have a large number that only create while Others are the only group to have all members

participating in some way. Both RMs and Archivists have a member that does not participate in either.

A total of four interviews were performed for the study. These interviews are beneficial because they express the various ways KM is considered. While each interviewee expressed their forms of KM differently, aspects like exit interviews or administrative-level records seem to be common themes. All four of the interviewees admit that there is not a RRS for their KMS, but one says they are currently creating it. Three of the four think it is important to have an IP involved in RRS creation and audits. The one that disagreed claims the Legal department is required to set RRSs. The interviewees claim they have RRSs for client files, various categories by departments and unique processes, that are set across their company by nation, and company audits. The fact that each interviewer defined KM and how their company performs KM activities differently complicates identifying how IPs are and should be involved. From these interviews, it seems apparent how important it is to have IPs involved in KMS RRSs. Another way to look at this is that amorphous programs like KM require trained professionals that can structure and implement key activities like RRS creation and audits.

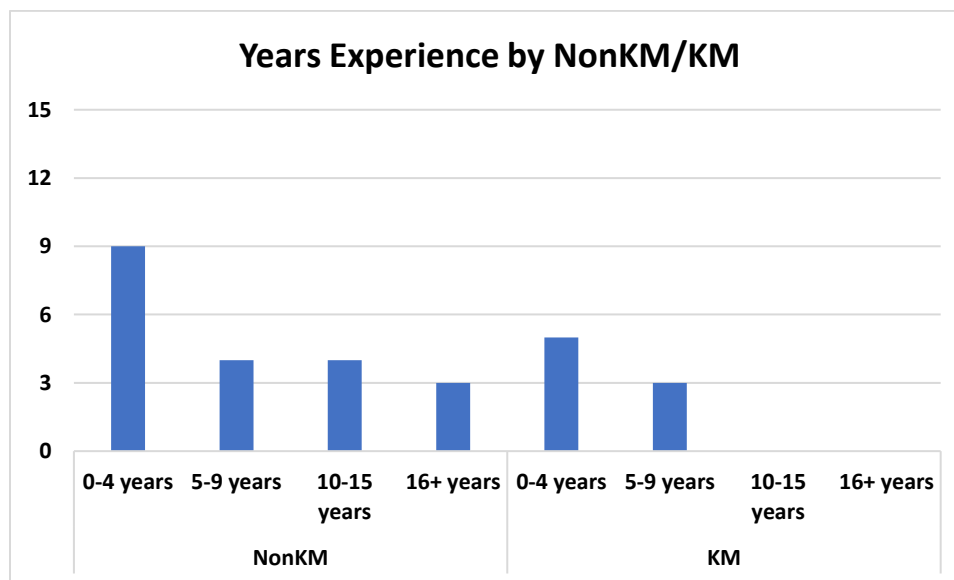
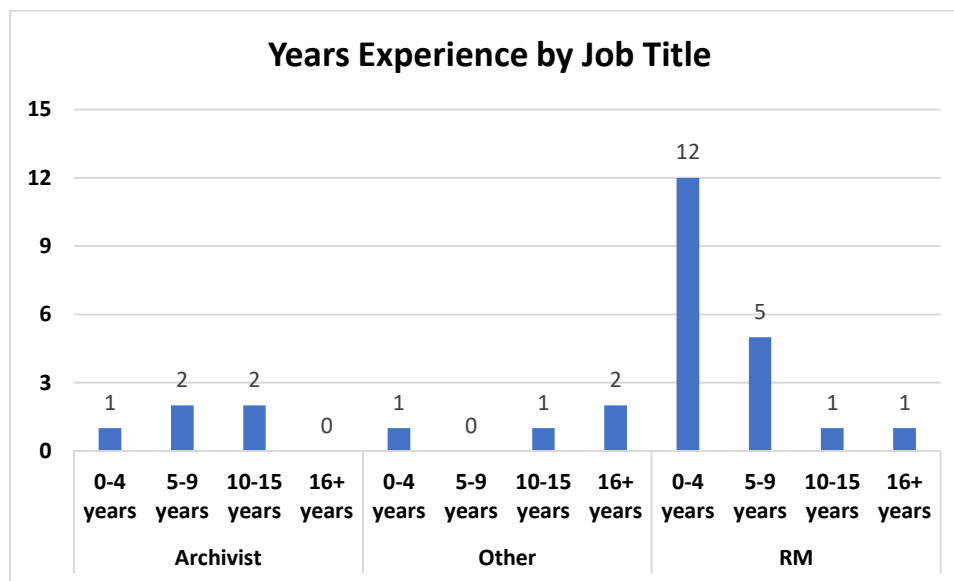


Analyzing survey-taker education reveals some interesting trends. Looking at Certificate and Graduate Degree data; RMs, Archivists, and Others present different trends in educational backgrounds.⁵ RMs are the only group where survey-takers have both an ILS degree and a Certificate (5 or 19%). The data also shows 6 (22%) only hold a Certificate and 8 (30%) have neither. It is interesting to note that if they do not have a Certificate they also do not have an ILS background. Archivist IPs only have ILS degrees (2 or 7%). Survey-takers in the Others category have either an ILS degree or a Certificate (1 or 4% and 1 or 4%). The small amount of data makes it problematic for representing all RMs, Archivists, or Others and further studies could shed more light on variations in educational backgrounds for IPs.

Connecting educational background to KMS RRSs, the 8 survey-takers in KM departments show various educational backgrounds. 7 are RMs and 1 is an Archivist. 4 of the RMs are IPs, 1 with both ILS and Certificate and 3 with Certificates only, and 3 are

⁵ One survey-taker did not identify their educational background. This means the statistical data is based on a total of 27 instead of 28.

Non-IPs. The Archivist is an IP with an ILS degree. Comparing KM and Non-KM departments, KM departments has 5 (63%) IPs while Non-KM departments have 10 (53%) IPs. This suggests that KM departments are more likely to have IPs to create and audit KMS RRSs.



The survey captured data on the number of years survey-takers have worked at their current positions. The total numbers are 14 (50%) 0-4 years, 7 (25%) 5-9 years, 4

(14%) 10-15 years, and 3 (11%) 16+ years. An interesting trend in the data shows KM positions are more likely to have incoming IPs than other departmental positions. To do this, analyzing IPs compared to Non-IPs in KM and Non-KM across years of experience is necessary. There are 8 KM positions, of which 5 are IPs and 3 are not. Of these 3 (38%) are IPs with 0-4 years of experience and 2 (25%) with 5-9 years of experience. 2 (25%) 0-4 years and 1 (13%) 5-9 years of experience make up the Non-IPs. There are 20 Non-KM positions, of which 10 are IPs and 10 are not. Of the 0-4 years of experience, 3 (15%) are IPs while 6 (30%) are not. Those with 5-9 years of experience are 2 (10%) IPs and 2 (10%) Non-IPs. Those with 10-15 years are 3 (15%) IPs and 1 (5%) Non-IPs. Finally, those with 16+ years of experience are 2 (10%) IPs and 1 (5%) Non-IPs.

With a more detailed analysis of trends between years of experience and IP status. KM positions show a higher percentage in IPs for both 0-4 years and 5-9 years of experience compared to Non-KM positions. There are 3 (38%) KM IPs with 0-4 years of experience compared to 2 (25%) Non-IPs. In comparison, there are 3 (15%) Non-KM IPs with 0-4 years of experience and 6 (30%) Non-IPs. For those with 5-9 years of experience in KM positions 2 (25%) are IPs and 1 (13%) are Non-IPs. Those with 5-9 years of experience in Non-KM positions show 2 (10%) are IPs while 2 (10%) are Non-IPs. These data suggest that KM positions are more likely to have IPs in the last nine years than Non-KM positions. One of the Non-KM survey-takers with less than ten years of experience claims that their replacement will need a degree and/or certification. It will be interesting to see what data future studies present about IPs and participation in RRS creation and auditing.

10+ years of experience shows the opposite for Non-KM positions. Looking at 10-15 years of experience, 3 (15%) are IPs compared to 1 (5%) Non-IPs. Similarly, 16+ years of experience shows 2 (10%) are IPs compared to 1 (5%) Non-IPs. It seems that those with more experience in their positions received training through courses or certification. This might not seem as impactful due to the small sample, but the fact that there are only 3 0-4 and 2 5-9 IPs raises questions about the inverse in IPs. Another way to look at this is that there are more Non-IPs participating in RRS creation/auditing in Non-KM positions than KM positions.

This comes as a shock due to the literature expressing IP saturated positions in Non-KM departments and a need for IPs in KM departments. The intentions for this study were to present evidence that something needs to be done to benefit records managing for KMSs. Instead, there is evidence that KM departments are hiring more IPs than Non-KM departments!

There are problems with the data due to there not being any KM positions older than 5-9 years. This could be interpreted as evidence that companies are hiring IPs more in recent years for KM positions. If this is true, hiring IPs for participating in important RM activities like RRSs are a reality. The first decade of the 21st century concerns that IPs are not involved in KMS records management activities like RRSs are being answered. A larger sample is necessary to identify statistical significance, but this study does present evidence a trend exists.

Throughout this study, documenting how data was analyzed became problematic. Using JMP analytical software does not ensure analysis will occur the same each analysis. For example, analyzing Years of Experience and Non-KM/KM data occurred

twice over the course of a month. The first analysis used analog computations while the second utilized JMP's graphing analytics. IPs with 0-4 Years of Experience in KM were 60% of the population the first time and 38% in the second analysis. After running the numbers using different graphing strategies, it became apparent JMP based the percentage on differing variables than calculated the first analysis. This actualization prompted appropriate descriptions for the data presented in this section.

Conclusion

The researcher set out to study whether information professionals (IPs) are involved in records retention schedule (RRS) creation and audits for companies using knowledge management (KM). IPs are defined as personnel with an Information Library Science degree or a Certificate in Records Management. The assumption was that IPs are not commonly included in RRS activities for companies using KM. Data from a survey and supplementary interviews shows this assumption is unfounded. Based on the findings, companies using KM are hiring IP personnel to work with their RRSs in the last ten years.

The study's findings provide a positive outlook for companies trying to control their knowledge. This is good news since KM is imperative for a company's competitiveness and survival. That being said, the study's small population sample causes problems for identifying significance in data trends. It would be fascinating to compare these findings with a larger study. The benefits could provide useful guidance for companies trying to optimize their KM programs. Based on the present data, companies are heading in the right direction.

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Glossary:

Terms:

Information Governance – a strategic, cross-disciplinary framework composed of standards, processes, roles, and metrics that hold organizations and individuals accountable for the proper handling of information assets.⁶

Information Professional – An individual trained for managing information. Examples: librarian, archivist, digital curator. **Scope:** Does not include discipline experts who have are not trained in records curation. Examples: chief knowledge officer, chief information officer, information technician.⁷

Knowledge Management – A dynamic program to promote the managing and sharing of institutional knowledge. Examples: connecting departments working on similar projects, identifying individuals leaving institution for knowledge retention.

Knowledge Management System – An IT system that captures, organizes, and makes accessible institutional knowledge. Example: Sharepoint, Intranet, webpage.

Knowledge Retention – Implicit knowledge that is passed or shared between individuals. Not codified. Examples: conversations, socio-cultural structures, experience on the job.

Lifecycle Model – (Visual!)

Record Life Cycle – Record's disposition throughout a record's time from creation to an archive or destruction. Example: A decision to ingest records as a whole or in parts into the archives.

Records Management - the field of management responsible for the efficient and systematic control of the creation, receipt, maintenance, use and disposition of records, including the processes for capturing and maintaining evidence of and information about business activities and transactions in the form of records.⁸

⁶ Definition from ARMA.org website. <https://www.arma.org/page/Certifications>

⁷ IT typically focuses on the technological side of information management. All examples are generalizations. The point is that IPs referenced in this paper have training in archival and/or library science skills.

⁸ ISO standard 15489

Records Manager – A certified individual who manages electronic (digital) records and the act to manage (curate) records.

Records Retention – Explicit knowledge that is codified in an artifact that is accessible through the KMS. Examples: documents (including electronic), audio/visual, ephemera.

Retention Schedule – A planned schedule setting the time a record will be re-appraised or deaccessioned/destroyed. Examples: personnel files – destroy after employee leaves company, legacy files – 75 years, financial files – 7 years.

Organizations:

Association for Information and Image Management (AIIM) – a non-profit organization with a mission to educate information professionals to “provide the most relevant, educational, and unbiased content to help you solve your business challenges.”

Association of Records Managers Administrators (ARMA) – A nonprofit international association serving over 10,000 information management professionals in the United States, Canada, and over 30 other countries, including records managers, MIS and ADP professionals, imaging specialists, archivists, hospital and legal administrators, librarians, and educators, ARMA provides education, research, and networking opportunities that enable its members to maximize the value of records, information, and knowledge as corporate assets. Formerly the Association of Records Managers and Administrators, ARMA publishes the bimonthly Information Management Journal.

Society of American Archivists (SAA) – Founded in 1934, SAA is the oldest professional organization of archivists in North America, dedicated to promoting the identification, preservation, and use of records of historical value. SAA publishes the newsletter Archival Outlook and the semiannual journal American Archivist.

Special Libraries Association (SLA) – Founded in 1909, SLA has an international membership of librarians and information specialists employed in special libraries serving the information needs of business, research, governments, universities, museums, newspapers, and other organizations and institutions (public and private) that use or produce specialized information. SLA publishes the monthly magazine Information Outlook.

Appendix

Survey

1. Just to confirm, do you manage records for a company that has a written policy for knowledge management?
 1. This question will determine whether the person surveyed fits the needs of my study. If no KM is in effect, the survey is dumped.
 1. If no, thank you message response.
2. What is your job title?
3. What kinds of records do you manage? Select all that apply.
 1. Analog records
 2. Electronic/digital records
4. How long have you held your current position? [“HOW LONG” IS TOO VAGUE?]
5. What department do you report to?
 1. Information Technology (IT)
 2. Library
 3. Archives
 4. Human Resources (HR)
 5. Financial
 6. Knowledge Management
 7. Legal
 8. Organizational Learning
 9. Organizational Excellence
 10. Other
6. Does a records retention schedule policy exist at your company?
7. Did you participate in records retention schedule creation?
 1. Yes
 2. No
 3. Our company does not have a RRS

8. If not, “Did your colleague or predecessor in your records management department participate in records retention schedule creation?”
9. If answered no to questions 8 and 9, “What department created the records retention schedules?”
 1. Library
 2. Information Technology (IT)
 3. Law
 4. Knowledge Management
 5. Human Resources (HR)
 6. Research and Development (R&D)
 7. Other department
 8. Don’t know/Not sure
10. In the last five years, has there been an audit or review of the records retention schedules?”
11. In the past five years, have you participated in auditing or reviewing the records retention schedules?
12. If not, “In the past five years, did your colleague or predecessor participate in auditing or reviewing the records retention schedules?”
13. In addition to records management, are you also responsible for your company’s archives or libraries?
 1. Yes
 2. No
 3. This company does not have an archive or library
14. Select all that apply: Do you have an undergraduate degree in any discipline listed below?
 1. This question will provide evidence of training from school. I need to
 1. Information Library Science
 2. Engineering
 3. Information Technology
 4. Computer Science
 5. History
 6. None of the above
 1. Enter undergraduate degree
15. Select all that apply: Do you have a graduate degree in any discipline listed below?
 1. Information Library Science
 2. Engineering
 3. Information Technology
 4. Computer Science

- 5. History
- 6. None of the above
 - 1. Enter graduate degree

16. Do you have a Records Management Certification?

- 1. Yes/No

17. Please explain anything that you would like to add about records management or retention schedules in your company below.

- 1. Text box for survey taker to explain their decisions above.

18. Would you be interested in participating in future phases of this research? Please check the box if you agree.

Interview

First, I want to THANK YOU for participating in the interview phase of my study on Records Managers and Records Retention Schedules in businesses using Knowledge Management. Before we start, I would like to ask you permission to record this interview. I do not intend to use any identifying information. If you have any questions, please ask.

May I record this interview?

- If it is okay, begin the recorder.

Knowledge Management is a management tool companies use to leverage intellectual capital especially company functions and projects when personnel move about or leave the company.

It is often in the form of a networking system (or Knowledge Management System like Sharepoint) where veteran employees share their knowledge with successors or colleagues in related positions or projects. Is there a formal or systematic Knowledge Management program in your place of work?

Question #2: Is there a retention schedule policy in place for the KMS records?

- Did they talk about records in the KMS?

Question #3: Who is the best person in the company to set RRS policy? Should more than one person be included?

- This could garner some interesting information about whether IPs are ideal or not. I want to work on this question further.

Question #4: Does an RM manage the KMS's records?

- Are the KMS records under a retention schedule as well?

Question #5: Anything else that needs to be said?

- Should RMs be involved in RRSs for KMSs?

- Perhaps the interviewee has knowledge about this topic that will help focus the study or suggest problems with the study.

Question #6: Re-ask if there is anything else.